## ABSTRACT

Methods for determining the compatibility of a plurality of fluid samples of different lubricating oil compositions with elastomers is provided. Each sample includes one or more base oils of lubricating viscosity and one or more lubricating oil additives.

The methods can advantageously be optimized using combinatorial chemistry, in which a database of combinations of lubricating oil compositions are generated. As market conditions vary and/or product requirements or customer specifications change, conditions suitable for forming desired products can be identified with little or no downtime.